



TORQ Analysis of Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic to Sewing Machine Operators

INPUT SECTION:

Transfer	Title	O* NET	Filters		
From Title:	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	51-4031.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Sewing Machine Operators	51-6031.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

OUTPUT SECTION:










Grand TORQ:

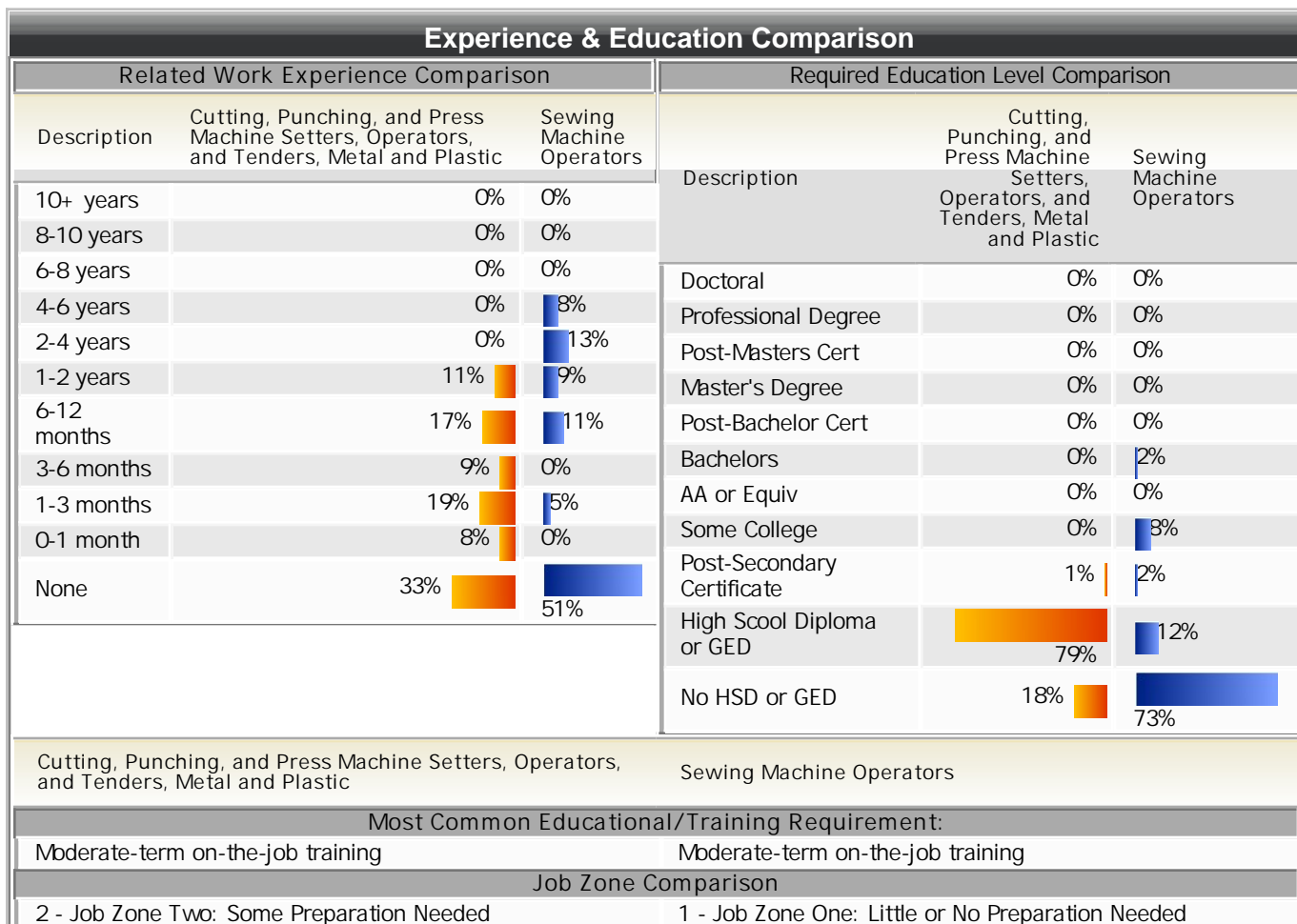
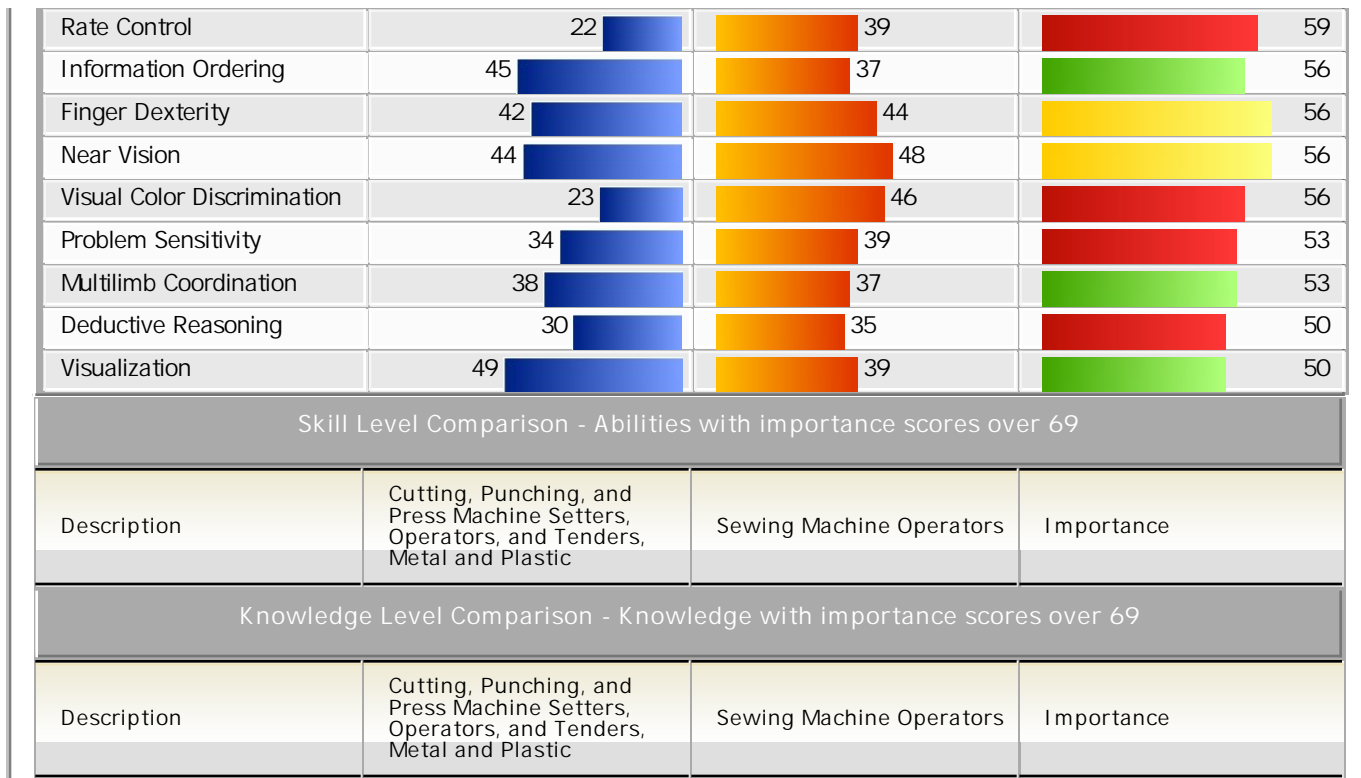
85

Ability TORQ				Skills TORQ				Knowledge TORQ			
Level	<div></div>	75		Level	<div></div>	91		Level	<div></div>	90	
Gaps To Narrow if Possible				Upgrade These Skills				Knowledge to Add			
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt	Knowledge	Level	Gap	Impt
Visual Color Discrimination	46	23	56	No Skills Upgrade Required!				No Knowledge Upgrades Required!			
Rate Control	39	17	59								
Arm-Hand Steadiness	51	7	65								
Problem Sensitivity	39	5	53								
Deductive Reasoning	35	5	50								
Near Vision	48	4	56								
Finger Dexterity	44	2	56								
LEVEL and IMPT (IMPORTANCE) refer to the Target Sewing Machine Operators. GAP refers to level difference between Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic and Sewing Machine Operators.											

ASK ANALYSIS

Ability Level Comparison - Abilities with importance scores over 50

Description	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	Sewing Machine Operators	Importance
Arm-Hand Steadiness	44 	51 	65 
Manual Dexterity	46 	42 	62 
Control Precision	50 	42 	62 





Some previous work-related skill, knowledge, or experience may be helpful in these occupations, but usually is not needed. For example, a teller might benefit from experience working directly with the public, but an inexperienced person could still learn to be a teller with little difficulty.

These occupations usually require a high school diploma and may require some vocational training or job-related course work. In some cases, an associate's or bachelor's degree could be needed.

Employees in these occupations need anywhere from a few months to one year of working with experienced employees.

No previous work-related skill, knowledge, or experience is needed for these occupations. For example, a person can become a cashier even if he/she has never worked before.

These occupations may require a high school diploma or GED certificate. Some may require a formal training course to obtain a license.

Employees in these occupations need anywhere from a few days to a few months of training. Usually, an experienced worker could show you how to do the job.

Tasks

Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic

Core Tasks

Generalized Work Activities:

- Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).
- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.
- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.
- Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
- Identifying Objects, Actions, and Events - Identifying information by categorizing, estimating, recognizing differences or similarities, and detecting changes in circumstances or events.

Specific Tasks

Occupation Specific Tasks:

- Adjust ram strokes of presses to specified lengths, using hand tools.
- Clean and lubricate machines.
- Examine completed workpieces for defects such as chipped edges and marred surfaces, and sort defective pieces according to types of flaws.
- Grind out burrs and sharp edges, using portable grinders, speed lathes, and polishing jacks.
- Hand-form, cut, or finish workpieces, using tools such as table saws, hand sledges, and anvils.
- Hone cutters with oilstones to remove

Sewing Machine Operators

Core Tasks

Generalized Work Activities:

- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).
- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.
- Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.

Specific Tasks

Occupation Specific Tasks:

- Attach buttons, hooks, zippers, fasteners, or other accessories to fabric, using feeding hoppers or clamp holders.
- Attach tape, trim, appliques, or elastic to specified garments or garment parts, according to item specifications.
- Baste edges of material to align and temporarily secure parts for final assembly.
- Cut excess material or thread from finished products.
- Cut materials according to specifications, using blades, scissors, or electric knives.
- Draw markings or pin appliques on fabric to obtain variations in design.
- Examine and measure finished articles to verify conformance to standards, using



nicks.

- Install, align, and lock specified punches, dies, cutting blades or other fixtures in rams or beds of machines, using gauges, templates, feelers, shims, and hand tools.
- Load workpieces, plastic material, or chemical solutions into machines.
- Lubricate workpieces with oil.
- Mark identifying data on workpieces.
- Measure completed workpieces to verify conformance to specifications, using micrometers, gauges, calipers, templates, or rulers.
- Place workpieces on cutting tables, manually or using hoists, cranes, or sledges.
- Plan sequences of operations, applying knowledge of physical properties of workpiece materials.
- Position guides, stops, holding blocks, or other fixtures to secure and direct workpieces, using hand tools and measuring devices.
- Position, align, and secure workpieces against fixtures or stops on machine beds or on dies.
- Preheat workpieces, using heating furnaces or hand torches.
- Read work orders and production schedules to determine specifications, such as materials to be used, locations of cutting lines, and dimensions and tolerances.
- Remove housings, feed tubes, tool holders, and other accessories in order to replace worn or broken parts such as springs and bushings.
- Replace defective blades or wheels, using hand tools.
- Scribe reference lines on workpieces as guides for cutting operations, according to blueprints, templates, sample parts, or specifications.
- Select, clean, and install spacers, rubber sleeves, and cutters on arbors.
- Set blade tensions, heights, and angles to perform prescribed cuts, using wrenches.
- Set stops on machine beds, change dies, and adjust components, such as rams or power presses, when making multiple or successive passes.
- Set up, operate, or tend machines to saw, cut, shear, slit, punch, crimp, notch, bend, or straighten metal or plastic material.
- Sharpen dulled blades, using bench grinders, abrasive wheels, or lathes.
- Start machines, monitor their operations, and record operational data.
- Test and adjust machine speeds and

rulers.

- Fold or stretch edges or lengths of items while sewing, in order to facilitate forming specified sections.
- Guide garments or garment parts under machine needles and presser feet to sew parts together.
- Inspect garments, and examine repair tags and markings on garments to locate defects or damage, and mark errors as necessary.
- Match cloth pieces in correct sequences prior to sewing them, and verify that dye lots and patterns match.
- Monitor machine operation to detect problems such as defective stitching, breaks in thread, or machine malfunctions.
- Mount attachments, such as needles, cutting blades, or pattern plates, and adjust machine guides according to specifications.
- Perform equipment maintenance tasks such as replacing needles, sanding rough areas of needles, or cleaning and oiling sewing machines.
- Perform specialized or automatic sewing machine functions, such as buttonhole making or tacking.
- Place spools of thread, cord, or other materials on spindles, insert bobbins, and thread ends through machine guides and components.
- Position and mark patterns on materials to prepare for sewing.
- Position items under needles, using marks on machines, clamps, templates, or cloth as guides.
- Position material or articles in clamps, templates, or hoop frames prior to automatic operation of machines.
- Record quantities of materials processed.
- Remove holding devices and finished items from machines.
- Repair or alter items by adding replacement parts or missing stitches.
- Select supplies such as fasteners and thread, according to job requirements.
- Start and operate or tend machines, such as single or double needle serging and flat-bed felling machines, to automatically join, reinforce, or decorate material or articles.
- Tape or twist together thread or cord to repair breaks.
- Turn knobs, screws, and dials to adjust settings of machines, according to garment styles and equipment performance.

Detailed Tasks



Test and adjust machine speeds and actions, according to product specifications, and using gauges and hand tools.

- Thread ends of metal coils from reels through slitters, and secure ends on recoilers.
- Turn controls to set cutting speeds, feed rates, and table angles for specified operations.
- Turn valves to start flow of coolant against cutting areas and to start airflow that blows cuttings away from kerfs.

Detailed Tasks

Detailed Work Activities:

- adjust production equipment/machinery setup
- attach or mark identification onto products or containers
- clean equipment or machinery
- examine products or work to verify conformance to specifications
- fabricate, assemble, or disassemble manufactured products by hand
- install equipment or attachments on machinery or related structures
- load or unload material or workpiece into machinery
- maintain or repair industrial or related equipment/machinery
- measure, weigh, or count products or materials
- monitor production machinery/equipment operation to detect problems
- move or fit heavy objects
- operate hoist, winch, or hydraulic boom
- operate metal or plastic fabricating equipment/machinery
- perform safety inspections in manufacturing or industrial setting
- plan or organize work
- read blueprints
- read production layouts
- read specifications
- read technical drawings
- read work order, instructions, formulas, or processing charts
- recognize characteristics of metals
- set up computer numerical control machines
- set up production equipment or machinery
- understand machine setup instructions
- understand technical operating, service or repair manuals
- use hand or power tools
- use precision measuring tools or equipment

Detailed Work Activities:

- adjust production equipment/machinery setup
- clean equipment or machinery
- cut or trim fabric or leather
- examine products or work to verify conformance to specifications
- install equipment or attachments on machinery or related structures
- load or unload material or workpiece into machinery
- maintain consistent production quality
- maintain production or work records
- monitor production machinery/equipment operation to detect problems
- operate sewing machine
- perform safety inspections in manufacturing or industrial setting
- read work order, instructions, formulas, or processing charts
- repair tears or defects in fabrics, garments, or leather products
- sew by hand
- use hand or power tools
- use portable electric fabric cutter

Labor Market Comparison

Description	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	Sewing Machine Operators	Difference
Median Wage	\$ 27,500	\$ 22,440	\$(5,060)
10th Percentile Wage	\$ 17,200	\$ 16,350	\$(850)
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 31,510	\$ 27,200	\$(4,310)
90th Percentile Wage	\$ 37,720	\$ 31,710	\$(6,010)
Mean Wage	\$ 27,250	\$ 23,030	\$(4,220)
Total Employment - 2007	450	1,080	630
Employment Base - 2006	461	1,077	616
Projected Employment - 2016	395	990	595
Projected Job Growth - 2006-2016	-14.3 %	-8.1 %	6.2 %
Projected Annual Openings - 2006-2016	11	10	-1

National Job Posting Trends

Trend for Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic

Trend for
Sewing
Machine
OperatorsData from [Indeed](http://Indeed.com)

**Recommended Programs**

No program data for the occupation.

Maine Statewide Promotion Opportunities for Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic

O* NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings
51-4031.00	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	100	2	450	\$27,500.00	\$0.00	-14%	11
51-4193.00	Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	93	2	120	\$32,160.00	\$4,660.00	16%	5
51-4122.00	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	92	2	120	\$36,960.00	\$9,460.00	2%	3
51-5023.00	Printing Machine Operators	91	2	790	\$29,710.00	\$2,210.00	-3%	18
51-9191.00	Cementing and Gluing Machine Operators and Tenders	84	1	80	\$27,620.00	\$120.00	-15%	2
51-9032.00	Cutting and Slicing Machine Setters, Operators, and Tenders	84	2	710	\$31,350.00	\$3,850.00	-23%	12
51-9041.00	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	84	2	260	\$28,330.00	\$830.00	-7%	5
51-2041.00	Structural Metal Fabricators and Fitters	83	3	680	\$36,030.00	\$8,530.00	5%	15
51-9196.00	Paper Goods Machine Setters, Operators, and Tenders	83	2	910	\$38,230.00	\$10,730.00	-26%	23
51-5021.00	Job Printers	82	3	140	\$31,890.00	\$4,390.00	-10%	2



51-2031.00	Engine and Other Machine Assemblers	82	3	20	\$29,010.00	\$1,510.00	-45%	1
51-4034.00	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	82	3	110	\$34,350.00	\$6,850.00	-9%	2
51-4121.07	Solderers and Brazers	82	2	1,610	\$38,030.00	\$10,530.00	7%	49
51-4023.00	Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	81	2	0	\$33,460.00	\$5,960.00	0%	0
51-9121.00	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	81	2	850	\$38,860.00	\$11,360.00	-26%	19

Top Industries for Sewing Machine Operators

Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Cut and sew apparel manufacturing	315200	37.46%	87,218	36,829	-57.77%
Other textile product mills	314900	8.50%	19,797	17,782	-10.18%
Textile furnishings mills	314100	7.91%	18,422	16,690	-9.40%
Self-employed workers, primary job	000601	7.29%	16,967	18,076	6.54%
Household and institutional furniture manufacturing	337120	6.35%	14,794	12,383	-16.30%
Apparel accessories and other apparel manufacturing	315900	2.75%	6,400	4,026	-37.09%
Apparel knitting mills	315100	2.14%	4,987	2,805	-43.75%
Medical equipment and supplies manufacturing	339100	2.01%	4,674	4,781	2.29%
Other furniture related product manufacturing	337900	1.88%	4,384	4,577	4.40%
Printing and related support activities	323100	1.73%	4,029	3,192	-20.77%
Motor vehicle parts manufacturing	336300	1.48%	3,443	2,741	-20.39%
Fabric mills	313200	1.36%	3,162	2,233	-29.38%
Drycleaning and laundry services	812300	1.35%	3,133	3,133	0.01%
Clothing stores	448100	1.31%	3,053	2,973	-2.63%
Footwear manufacturing	316200	0.92%	2,134	1,000	-53.16%



Top Industries for Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic

Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Employment services	561300	10.95%	29,744	36,424	22.46%
Motor vehicle parts manufacturing	336300	10.08%	27,394	19,628	-28.35%
Architectural and structural metals manufacturing	332300	8.80%	23,910	22,983	-3.88%
Forging and stamping	332100	6.81%	18,517	13,040	-29.57%
Plastics product manufacturing	326100	5.31%	14,440	13,775	-4.60%
Other fabricated metal product manufacturing	332900	3.61%	9,822	7,833	-20.26%
Ventilation, heating, air-conditioning, and commercial refrigeration equipment manufacturing	333400	2.93%	7,972	6,600	-17.21%
Metalworking machinery manufacturing	333500	2.35%	6,374	4,697	-26.32%
Other general purpose machinery manufacturing	333900	1.82%	4,945	4,018	-18.76%
Boiler, tank, and shipping container manufacturing	332400	1.82%	4,936	4,003	-18.90%
Machine shops	332710	1.79%	4,876	3,630	-25.55%
Steel product manufacturing from purchased steel	331200	1.79%	4,869	3,878	-20.35%
Spring and wire product manufacturing	332600	1.76%	4,776	3,182	-33.37%
Agriculture, construction, and mining machinery manufacturing	333100	1.69%	4,593	3,859	-15.97%
Metal and mineral (except petroleum) merchant wholesalers	423500	1.59%	4,325	4,275	-1.16%